

**WEST**[Help](#)[Logout](#)[Interrupt](#)[Main Menu](#)[Search Form](#)[Posting Counts](#)[Show S Numbers](#)[Edit S Numbers](#)[Preferences](#)**Search Results -**

Term	Documents
PATHWAY.USPT.	31382
PATHWAYS.USPT.	19779
(3 AND PATHWAY).USPT.	39

**Database:**

US Patents Full-Text Database  
JPO Abstracts Database  
EPO Abstracts Database  
Derwent World Patents Index  
IBM Technical Disclosure Bulletins

13 and pathway

**Refine Search:**[Clear](#)**Search History****Today's Date: 9/29/2000**

<u>DB Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
USPT	13 and pathway	39	<u>L4</u>
USPT	12 and transformation	54	<u>L3</u>
USPT	11 and cellular	164	<u>L2</u>
USPT	drug adj2 response	599	<u>L1</u>

**WEST**[Generate Collection](#)**Search Results - Record(s) 1 through 20 of 39 returned.**☐ 1. Document ID: US 6121030 A

L4: Entry 1 of 39

File: USPT

Sep 19, 2000

US-PAT-NO: 6121030

DOCUMENT-IDENTIFIER: US 6121030 A

TITLE: CSAPK-2 protein and uses therefor

DATE-ISSUED: September 19, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Acton; Susan	Lexington	MA	N/A	N/A

US-CL-CURRENT: 435/194; 435/252.3, 435/320.1, 435/325, 435/6, 530/350

## ABSTRACT:

The present invention provides a novel protein kinase, CSAPK-2, as well as CSAPK-2 fusion proteins, antigenic peptides and anti-CSAPK-2 antibodies.

6 Claims, 5 Drawing figures Exemplary Claim Number: 1

Number of Drawing Sheets: 11

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ 2. Document ID: US 6121000 A

L4: Entry 2 of 39

File: USPT

Sep 19, 2000

US-PAT-NO: 6121000

DOCUMENT-IDENTIFIER: US 6121000 A

TITLE: Antitumor antisense sequences directed against R1 and R2 components of ribonucleotide reductase

DATE-ISSUED: September 19, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Wright; Jim A.	Toronto	N/A	N/A	CAX
Young; Aiping H.	Toronto	N/A	N/A	CAX

US-CL-CURRENT: 435/6; 435/320.1, 536/23.1, 536/24.5

## ABSTRACT:

Compounds and methods for modulating cell proliferation, preferably inhibiting the proliferation of tumor cells are described. Compounds that may be used to modulate cell proliferation include antisense oligonucleotides complementary to regions of the mammalian ribonucleotide reductase genes.

11 Claims, 23 Drawing figures Exemplary Claim Number: 4  
Number of Drawing Sheets: 23

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ 3. Document ID: US 6117654 A

L4: Entry 3 of 39

File: USPT

Sep 12, 2000

US-PAT-NO: 6117654

DOCUMENT-IDENTIFIER: US 6117654 A

TITLE: Nucleic acid molecules encoding Tango-77-polypeptides

DATE-ISSUED: September 12, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Pan; Yang	Brookline	MA	N/A	N/A

US-CL-CURRENT: 435/69.5; 435/252.3, 435/320.1, 435/325, 435/471, 435/70.1, 435/71.1, 435/71.2, 530/351, 536/23.1, 536/23.5, 536/24.3, 536/24.31

## ABSTRACT:

Novel Tango-77 polypeptides, proteins, and nucleic acid molecules are disclosed. In addition to isolated, full-length Tango-77 proteins, the invention further provides isolated Tango-77 fusion proteins, antigenic peptides and anti-Tango-77 antibodies. The invention also provides Tango-77 nucleic acid molecules, recombinant expression vectors containing a nucleic acid molecule of the invention, host cells into which the expression vectors have been introduced and non-human transgenic animals in which a Tango-77 gene has been introduced or disrupted. Diagnostic, screening and therapeutic methods utilizing compositions of the invention are also provided.

43 Claims, 118 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 118

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

---

☐ 4. Document ID: US 6114123 A

L4: Entry 4 of 39

File: USPT

Sep 5, 2000

US-PAT-NO: 6114123

DOCUMENT-IDENTIFIER: US 6114123 A

TITLE: Lipocalin family protein

DATE-ISSUED: September 5, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Murry; Lynn E.	Portola Valley	CA	N/A	N/A
Tang; Tom Y.	San Jose	CA	N/A	N/A
Baughn; Mariah R.	San Leandro	CA	N/A	N/A

US-CL-CURRENT: 435/6; 435/252.3, 435/320.1, 435/325, 435/69.1, 530/300, 530/350, 536/23.1

## ABSTRACT:

The invention provide a mammalian nucleic acid molecule and fragments thereof. It also provides for the use of the mammalian nucleic acid molecule for the characterization, diagnosis, evaluation, treatment, or prevention of conditions, diseases and disorders associated with gene expression and for the production of a model system. The invention additionally provides expression vectors and host cells for the production of the protein encoded by the mammalian nucleic acid molecule.

13 Claims, 5 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 5

---

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

---

☐ 5. Document ID: US 6093545 A

L4: Entry 5 of 39

File: USPT

Jul 25, 2000

US-PAT-NO: 6093545  
DOCUMENT-IDENTIFIER: US 6093545 A

TITLE: Methods for detecting nucleic acid molecules encoding a member of the muscarinic family of receptors

DATE-ISSUED: July 25, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Goodearl; Andrew D. J.	Natick	MA	N/A	N/A
Glucksmann; M. Alexandra	Lexington	MA	N/A	N/A

US-CL-CURRENT: 435/6

ABSTRACT:

The invention provides methods for detecting the presence of a nucleic molecule encoding a muscarinic acetylcholine receptor 6 ("mAChR-6") family member.

17 Claims, 3 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 10

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

---

☐ 6. Document ID: US 6074872 A

L4: Entry 6 of 39

File: USPT

Jun 13, 2000

US-PAT-NO: 6074872  
DOCUMENT-IDENTIFIER: US 6074872 A

TITLE: Cortistatin: nucleic acids that encode these neuropeptides

DATE-ISSUED: June 13, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sutcliffe; J. Gregor	Cardiff	CA	N/A	N/A
de Lecea; Luis	Del Mar	CA	N/A	N/A

US-CL-CURRENT: 435/325; 435/320.1, 536/23.51

ABSTRACT:

The present invention relates generally to nucleic acids encoding a novel neuropeptide designated cortistatin. The cortistatin nucleic acids, proteins and polypeptides thereof along with anti-cortistatin antibodies are useful in both screening methods, diagnostic methods and therapeutic methods related to modulation of sleep and disorders thereof.

6 Claims, 20 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 9

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

---

☐ 7. Document ID: US 6051225 A

L4: Entry 7 of 39

File: USPT

Apr 18, 2000

US-PAT-NO: 6051225

DOCUMENT-IDENTIFIER: US 6051225 A

TITLE: Family of high affinity, modified antibodies for cancer treatment

DATE-ISSUED: April 18, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Mezes; Peter S.	Midland	MI	N/A	N/A
Gourlie; Brian B.	Midland	MI	N/A	N/A
Rixon; Mark W.	Midland	MI	N/A	N/A
Schlom; Jeffrey	Potomac	MD	N/A	N/A
Kaplan; Donald A.	Cincinnati	OH	N/A	N/A
Anderson; W. H. Kerr	Midland	MI	N/A	N/A

US-CL-CURRENT: 424/133.1; 424/155.1, 435/7.92, 530/387.3, 530/388.8,  
530/388.85, 530/391.3, 530/391.7

## ABSTRACT:

This invention concerns a family of chimeric antibodies with high affinities to a high molecular weight, tumor-associated sialylated glycoprotein antigen (TAG-72) of human origin. These antibodies have (1) high affinity animal V.sub.H and V.sub.L sequences which mediate TAG-72 binding and (2) human C.sub.H and C.sub.L regions. They are thought to produce significantly fewer side-effects when administered to human patients by virtue of their human C.sub.H and C.sub.L antibody domains. The nucleotide and amino acid sequences of V.sub.H .alpha.TAG V.sub.H, CC46 V.sub.H, CC49.sub.H, CC83 V.sub.H, and CC92 V.sub.H, and CC49.sub.L, CC83 V.sub.L, and CC92 V.sub.L idio type sequences are disclosed, as well as in vivo methods of treatment and diagnostic assay using these chimeric antibodies.

9 Claims, 46 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 64

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	EXOC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ 8. Document ID: US 6043211 A

L4: Entry 8 of 39

File: USPT

Mar 28, 2000

US-PAT-NO: 6043211  
DOCUMENT-IDENTIFIER: US 6043211 A

TITLE: Method for inhibiting the activity of a platelet-derived growth factor receptor binding protein

DATE-ISSUED: March 28, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Williams; Lewis Thomas	Tiburon	CA	N/A	N/A
Escobedo; Jaime A.	San Francisco	CA	N/A	N/A

US-CL-CURRENT: 514/2; 435/7~~1~~, 436/501, 514/12, 514/13, 514/14, 530/300, 530/326, 530/327, 530/350

ABSTRACT:

DNA sequences encoding human platelet-derived growth factor receptors (hPDGF-R), and expression constructs comprising sequences which encode a receptor that can be secreted or incorporated into the membrane of a mammalian cell. Peptide fragments with functions equivalent to the wild-type receptor, conferring a PDGF-sensitive mitogenic response on cells lacking the receptor are provided. The constructs can be used for enhancing PDGF response of cells, determining the regions involved in transducing the signal in response to PDGF binding, providing mutated analogs and evaluating drugs for their physiologic activity. Soluble fragments comprising PDGF receptor sequences are also provided, including important intracellular kinase insert sequences which interact with intracellular proteins.

12 Claims, 14 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 8

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ 9. Document ID: US 6043040 A

L4: Entry 9 of 39

File: USPT

Mar 28, 2000

US-PAT-NO: 6043040  
DOCUMENT-IDENTIFIER: US 6043040 A

TITLE: Csak-3 nucleic acid molecules and uses therefor

DATE-ISSUED: March 28, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Acton; Susan	Lexington	MA	N/A	N/A

US-CL-CURRENT: 435/6; 435/194, 435/252~~3~~, 435/320~~1~~, 435/325, 536/23~~2~~

ABSTRACT:

The invention provides isolated nucleic acid molecules, designated CSAPK-3 nucleic acid molecules, which encode novel cardiovascular system associated protein kinases. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing CSAPK-3 nucleic acid molecules, host cells into which the expression vectors have been introduced, and methods for producing CSAPK-3 polypeptides.

108 Claims, 5 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 11

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

---

☐ 10. Document ID: US 6037148 A

L4: Entry 10 of 39

File: USPT

Mar 14, 2000

US-PAT-NO: 6037148

DOCUMENT-IDENTIFIER: US 6037148 A

TITLE: MTBX protein and nucleic acid molecules and uses therefor

DATE-ISSUED: March 14, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Khodadoust; Mehran	Chestnut Hill	MA	N/A	N/A

US-CL-CURRENT: 435/69.1; 435/252.3, 435/320.1, 435/325, 536/23.1

ABSTRACT:

Novel MTbx polypeptides, proteins, and nucleic acid molecules are disclosed. In addition to isolated, full-length MTbx proteins, the invention further provides isolated MTbx fusion proteins, antigenic peptides and anti-MTbx antibodies. The invention also provides MTbx nucleic acid molecules, recombinant expression vectors containing a nucleic acid molecule of the invention, host cells into which the expression vectors have been introduced and non-human transgenic animals in which a MTbx gene has been introduced or disrupted. Diagnostic, screening and therapeutic methods utilizing compositions of the invention are also provided.

26 Claims, 2 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 2

---

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

---

☐ 11. Document ID: US 6031078 A

L4: Entry 11 of 39

File: USPT

Feb 29, 2000



US-PAT-NO: 6031078

DOCUMENT-IDENTIFIER: US 6031078 A

TITLE: MTbx protein and nucleic acid molecules and uses therefor

DATE-ISSUED: February 29, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Khodadoust; Mehran	Chestnut Hill	MA	N/A	N/A

US-CL-CURRENT: 530/350; 530/300

## ABSTRACT:

Novel MTbx polypeptides, proteins, and nucleic acid molecules are disclosed. In addition to isolated, full-length MTbx proteins, the invention further provides isolated MTbx fusion proteins, antigenic peptides and anti-MTbx antibodies. The invention also provides MTbx nucleic acid molecules, recombinant expression vectors containing a nucleic acid molecule of the invention, host cells into which the expression vectors have been introduced and non-human transgenic animals in which a MTbx gene has been introduced or disrupted. Diagnostic, screening and therapeutic methods utilizing compositions of the invention are also provided.

17 Claims, 29 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 29

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	NMC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	-----------	-------

☐ 12. Document ID: US 6025183 A

L4: Entry 12 of 39

File: USPT

Feb 15, 2000

US-PAT-NO: 6025183

DOCUMENT-IDENTIFIER: US 6025183 A

TITLE: Transgenic animal assay system for anti-cholinesterase substances

DATE-ISSUED: February 15, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Soreq; Hermona	Rishon le Zion	N/A	N/A	ILX
Zakut; Haim	Savyon	N/A	N/A	ILX
Shani; Moshe	M.P. Modi'in	N/A	N/A	ILX

US-CL-CURRENT: 435/252.3; 435/197, 435/320.1, 435/69.1, 536/23.1, 536/23.2,  
536/23.5, 536/24.1

## ABSTRACT:

The present invention provides a transgenic animal assay system which provides a model system for testing for, and treatment of, cholinergic deficits and imbalances in mammals such as cognitive functioning in Alzheimer's patients, certain types of retinal photoreceptor degeneration, hematopoietic disorders, and screening for and susceptibility to anti-cholinesterase compounds. The transgenic animals and progeny thereof are transformed with a recombinant expression vector of the present invention. The recombinant expression vector comprises a DNA sequence encoding a heterologous cholinesterase (ChE) enzyme and promoter.

7 Claims, 24 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 15

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	K00C	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ 13. Document ID: US 5998383 A

L4: Entry 13 of 39

File: USPT

Dec 7, 1999

US-PAT-NO: 5998383  
DOCUMENT-IDENTIFIER: US 5998383 A

TITLE: Antitumor antisense sequences directed against ribonucleotide reductase

DATE-ISSUED: December 7, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Wright; Jim A.	Winnipeg, Manitoba	N/A	N/A	CAX
Young; Aiping H.	Winnipeg, Manitoba	N/A	N/A	CAX

US-CL-CURRENT: 514/44, 435/183, 435/325, 435/354, 435/357, 435/366, 435/375, 435/440, 435/6, 435/91.1, 536/23.2, 536/24.31, 536/24.33, 536/24.5

ABSTRACT:

A synthetic antisense oligonucleotide comprising at least seven nucleotides or nucleotide analogues having a sequence complementary to the mRNA sequence of ribonucleotide reductase dimeric protein component R2 including SEQ ID Nos:1-102 is disclosed. A synthetic antisense oligonucleotide comprising at least seven nucleotides or nucleotide analogues having a sequence complementary to the mRNA sequence of ribonucleotide reductase dimeric protein component R1 including SEQ ID Nos:103-161 is also disclosed. The invention also discloses pharmaceutical compositions including the synthetic antisense oligonucleotides of the present invention and methods of using the antisense oligonucleotides to modulation proliferative cells including neoplastic cells.

31 Claims, 10 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 11

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ 14. Document ID: US 5993813 A

L4: Entry 14 of 39

File: USPT

Nov 30, 1999

US-PAT-NO: 5993813  
DOCUMENT-IDENTIFIER: US 5993813 A

TITLE: Family of high affinity, modified antibodies for cancer treatment

DATE-ISSUED: November 30, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Mezes; Peter S.	Midland	MI	N/A	N/A
Gourlie; Brian B.	Midland	MI	N/A	N/A
Rixon; Mark W.	Midland	MI	N/A	N/A
Schlom; Jeffrey	Potomac	MD	N/A	N/A
Kaplan; Donald A.	Cincinnati	OH	N/A	N/A
Anderson; W. H. Kerr	Midland	MI	N/A	N/A

US-CL-CURRENT: 424/133.1; 424/130.1, 424/138.1, 530/387.3, 530/388.8, 530/391.3

ABSTRACT:

This invention concerns a family of chimeric antibodies with high affinities to a high molecular weight, tumor-associated sialylated glycoprotein antigen (TAG-72) of human origin. These antibodies have (1) high affinity animal V.sub.H and V.sub.L sequences which mediate TAG-72 binding and (2) human C.sub.H and C.sub.L regions. They are thought to produce significantly fewer side-effects when administered to human patients by virtue of their human C.sub.H and C.sub.L antibody domains. The nucleotide and amino acid sequences of V.sub.H .alpha.TAG V.sub.H, CC46 V.sub.H, CC49.sub.H, CC83 V.sub.H, and CC92 V.sub.H, and CC49.sub.L, CC83 V.sub.L, and CC92 V.sub.L idio type sequences are disclosed, as well as in vivo methods of treatment and diagnostic assay using these chimeric antibodies.

13 Claims, 41 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 62

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

---

☐ 15. Document ID: US 5976825 A

L4: Entry 15 of 39

File: USPT

Nov 2, 1999

US-PAT-NO: 5976825  
DOCUMENT-IDENTIFIER: US 5976825 A

TITLE: Drug screening process

DATE-ISSUED: November 2, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hochman; Daryl W.	Seattle	WA	N/A	N/A

US-CL-CURRENT: 435/29; 435/4

ABSTRACT:

There is disclosed a method for screening drug candidate compounds for anti-epileptic activity, a method for screening drug candidate compounds for activity to prevent or treat symptoms of Alzheimer's disease, and a method for determining cell viability and health of living cells inside polymeric tissue implants.

12 Claims, 3 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 6

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMMC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ 16. Document ID: US 5972622 A

L4: Entry 16 of 39

File: USPT

Oct 26, 1999

US-PAT-NO: 5972622  
DOCUMENT-IDENTIFIER: US 5972622 A

TITLE: Method of detecting apoptosis using an anti-human GP46 monoclonal anti-body

DATE-ISSUED: October 26, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Desjardins; Louise	Gloucester, Ontario	N/A	N/A	CAX

US-CL-CURRENT: 435/7.1; 435/7.21, 436/503, 436/504, 436/507, 436/512, 436/544, 436/545, 436/546, 436/547

ABSTRACT:

This invention relates to antibodies or fragments thereof that can be used as indicators of apoptosis. More specifically, this invention relates to antibodies and fragments thereof that selectively bind GP46, a protein whose levels increase significantly upon induction of apoptosis. This invention also relates to the hybridomas that produce anti-GP46 monoclonal antibodies. This invention also discloses a method of detecting cell death by apoptosis in vitro or in vivo by detecting and quantifying GP46 present in biological samples, comprising contacting the sample with the antibodies or fragments to form GP46 immunocomplexes, which may then be detected by the use of known methods. This detection method is useful for research into apoptosis and research relating to diseases in which apoptosis is involved. This method could also be used to diagnose the extent of damage caused by a particular disease or to evaluate the efficacy of drug treatments. The present invention also relates to a method of using the anti-GP46 antibodies or fragments in nuclear medical imaging. The present invention further relates to therapeutic uses of the anti-GP46 antibodies or fragments. The antibodies or fragments can also be incorporated into kits for the detection of apoptosis.

into kits for the detection of apoptosis.

15 Claims, 4 Drawing figures Exemplary Claim Number: 1,8  
Number of Drawing Sheets: 4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ 17. Document ID: US 5969163 A

L4: Entry 17 of 39

File: USPT

Oct 19, 1999

US-PAT-NO: 5969163

DOCUMENT-IDENTIFIER: US 5969163 A

TITLE: Ortho-quinone derivatives, novel synthesis therefor, and their use in the inhibition of neoplastic cell growth

DATE-ISSUED: October 19, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Frydman; Benjamin J.	Madison	WI	N/A	N/A
Witiak, deceased; Donald T.	late of Madison	WI	N/A	N/A
Sun; Jerry Shunneng	Madison	WI	N/A	N/A
Geiser; Andrew H.	Madison	WI	N/A	N/A

US-CL-CURRENT: 549/389; 549/461

ABSTRACT:

A process for the preparation of .beta.-lapachone and dunnione derivatives of formulae I and II ##STR1## wherein, the a solution of lawsone in dimethylsulfoxide at a temperature of -78.degree. C. or less is reacted with lithium hydride forming the lithium salt of lawsone; alkylating the lithium salt with an allyl halide; and cyclizing the C-alkylated lawsone derivative.

18 Claims, 10 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 10

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ 18. Document ID: US 5968817 A

L4: Entry 18 of 39

File: USPT

Oct 19, 1999

US-PAT-NO: 5968817  
DOCUMENT-IDENTIFIER: US 5968817 A

TITLE: DNA encoding serotonin receptors

DATE-ISSUED: October 19, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sutcliffe; J. Gregor	Cardiff	CA	N/A	N/A
Erlander; Mark G.	Encinitas	CA	N/A	N/A
Lovenberg; Timothy W.	San Diego	CA	N/A	N/A

US-CL-CURRENT: 435/325; 435/320.1, 435/69.1, 536/23.5

ABSTRACT:

The present invention describes nucleic acid molecules encoding human serotonin receptors, recombinant serotonin receptor proteins, cultured cells expressing recombinant serotonin receptor proteins, antibodies immunoreactive with serotonin receptor proteins, polypeptide serotonin receptor antagonists, oligonucleotide probes used for detecting nucleic acids which encode a human serotonin receptor, and nonhuman transgenic animals which express recombinant human serotonin receptor. Also disclosed are methods for screening for ligand binding to the described serotonin receptors and for serotonin receptor agonists and antagonists, for detection of serotonin receptors in tissues, and for therapeutic treatments involving the described human serotonin receptors.

14 Claims, 11 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 12

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	-----------	-------

☐ 19. Document ID: US 5968983 A

L4: Entry 19 of 39

File: USPT

Oct 19, 1999

US-PAT-NO: 5968983  
DOCUMENT-IDENTIFIER: US 5968983 A

TITLE: Method and formulation for treating vascular disease

DATE-ISSUED: October 19, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kaesemeyer; Wayne H.	Augusta	GA	N/A	N/A

US-CL-CURRENT: 514/564; 514/460, 514/565

ABSTRACT:

A therapeutic mixture comprised of L-arginine and inhibitors of Hmg--CoA-Reductase is disclosed for the treatment of diseases related to endothelial dysfunction, wherein the endothelial dysfunction is relieved by stimulating the constitutive form of nitric oxide synthase (cNOS) to produce native nitric oxide (NO).

19 Claims, 2 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ 20. Document ID: US 5965352 A

L4: Entry 20 of 39

File: USPT

Oct 12, 1999

US-PAT-NO: 5965352

DOCUMENT-IDENTIFIER: US 5965352 A

TITLE: Methods for identifying pathways of drug action

DATE-ISSUED: October 12, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Stoughton; Roland	San Diego	CA	N/A	N/A
Friend; Stephen H.	Seattle	WA	N/A	N/A

US-CL-CURRENT: 435/4; 435/6, 435/7.1, 435/91.2, 436/501, 536/23.1, 536/24.3,  
700/266, 708/400

ABSTRACT:

The present invention provides methods for identifying and representing the biological pathways of drug action on a cell by: (i) measuring responses of cellular constituents to graded exposures of the cell to a drug of interest; (ii) measuring the responses of cellular constituents to perturbations in one or more biological pathways of the cell; and (iii) scaling a combination of the measured pathway responses to fit the measured drug responses best according to an objective measure. In alternative embodiments, the present invention also provides for assessing the significance of the identified representation and for verifying that the identified pathways are actual pathway of drug action. In various embodiments, the effects on the cell can be determined by measuring gene expression, protein abundances, protein activities, or a combination of such measurements. In various embodiments, perturbation to a biological pathway in the cell can be made by use of titratable expression systems, use of transfection systems, modification to abundances of pathway RNAs, modifications to abundances of pathway proteins, or modifications to activities of the pathway proteins. The present invention also provides methods for drug development based on the methods for identifying biological pathways of drug action, and methods for representing the biological pathways involved in the effect of an environmental change upon a cell.

45 Claims, 15 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 12

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

Generate Collection

Term	Documents
PATHWAY.USPT.	31382
PATHWAYS.USPT.	19779
(3 AND PATHWAY).USPT.	39



Documents, starting with Document:

**Display Format:**

**WEST****Generate Collection****Search Results - Record(s) 21 through 39 of 39 returned.**☐ **21. Document ID: US 5945307 A**

L4: Entry 21 of 39

File: USPT

Aug 31, 1999

US-PAT-NO: 5945307

DOCUMENT-IDENTIFIER: US 5945307 A

TITLE: Isolated nucleic acid molecules encoding a G-protein coupled receptor showing homology to the 5HT family of receptors

DATE-ISSUED: August 31, 1999

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Glucksmann; M. Alexandra	Lexington	MA	N/A	N/A
Robison; Keith	Wilmington	MA	N/A	N/A

US-CL-CURRENT: 435/69.1; 435/252.3, 435/254.11, 435/320.1, 435/325, 536/23.5

## ABSTRACT:

The present invention provides isolated nucleic acid molecules encoding a G-protein coupled receptor that shows homology to the 5HT family of receptors. The present invention further provides vectors containing the nucleic acid molecules, hosts transformed or transfected with the nucleic acid molecules and methods of producing the G-protein coupled receptor.

16 Claims, 5 Drawing figures Exemplary Claim Number: 1

Number of Drawing Sheets: 5

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ **22. Document ID: US 5942420 A**

L4: Entry 22 of 39

File: USPT

Aug 24, 1999

US-PAT-NO: 5942420  
DOCUMENT-IDENTIFIER: US 5942420 A

TITLE: Molecules of the follistatin-related protein family and uses therefor

DATE-ISSUED: August 24, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Holtzman; Douglas A.	Cambridge	MA	N/A	N/A

US-CL-CURRENT: 435/69.1; 435/252.3, 435/254.11, 435/320.1, 435/325, 536/23.1, 536/23.5

ABSTRACT:

Novel FMCP polypeptides, proteins, and nucleic acid molecules are disclosed. In addition to isolated, full-length FMCP proteins, the invention further provides isolated FMCP fusion proteins, antigenic peptides and anti-FMCP antibodies. The invention also provides FMCP nucleic acid molecules, recombinant expression vectors containing a nucleic acid molecule of the invention, host cells into which the expression vectors have been introduced and non-human transgenic animals in which a FMCP gene has been introduced or disrupted. Diagnostic, screening and therapeutic methods utilizing compositions of the invention are also provided.

64 Claims, 6 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 6

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	ROMC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

---

☐ 23. Document ID: US 5932780 A

L4: Entry 23 of 39

File: USPT

Aug 3, 1999

US-PAT-NO: 5932780  
DOCUMENT-IDENTIFIER: US 5932780 A

TITLE: Transgenic non-human animal assay system for anti-cholinesterase substances

DATE-ISSUED: August 3, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Soreq; Hermona	Rishon le Zion	N/A	N/A	ILX
Zakut; Haim	Savyon	N/A	N/A	ILX
Shani; Moshe	Modi'in	N/A	N/A	ILX

US-CL-CURRENT: 800/13; 800/14, 800/18, 800/3, 800/9

ABSTRACT:

The present invention relates to novel alternative forms of human acetylcholinesterase (AChE) and nucleotide sequences encoding the same. The genes encoding the novel forms of human AChE have been identified in various malignant tumor cells. In a further aspect, the invention relates to a transgenic animal assay system for evaluating efficacy of drugs against cholinergic proteins, prior to or in the course of therapeutic treatment. Transgenic animals, preferably developing tadpole of Xenopus or mice which express human AChE, are used. The transgenic animal assay system is also useful for evaluating the toxicity of substances which potentially block human AChE (e.g. organophosphorous compounds).

9 Claims, 28 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 40

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KIMC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ 24. Document ID: US 5916906 A

L4: Entry 24 of 39

File: USPT

Jun 29, 1999

US-PAT-NO: 5916906  
DOCUMENT-IDENTIFIER: US 5916906 A

TITLE: Compositions comprising nicotinylalanine and an inhibitor of glycine conjugation or vitamin B6

DATE-ISSUED: June 29, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shaskan; Edward G.	West Hartford	CT	06107	N/A

US-CL-CURRENT: 514/356; 514/351, 514/353

ABSTRACT:

This invention relates to compositions comprising nicotinylalanine (NAL) and/or related analogues, and an inhibitor of glycine conjugation, either synthetic or naturally occurring. Vitamin B6 may also be present in the compositions of this invention in place of, or in addition to, the inhibitor of glycine conjugation. The compositions may be pharmaceutical in nature. The compositions are useful for inhibiting cellular poly(ADP-ribose) polymerase (PARP, PARS, poly(ADP-ribose) synthetase), an enzyme which causes cellular toxicity and which is activated in a variety of toxic and pathological conditions. PARP is inhibited by some metabolites of the tryptophan oxidative pathway, including nicotinamide, kynurenic acid and xanthurenic acid, which are induced by interferon-gamma. The NAL-containing compositions of the invention enhance the intracellular levels of these metabolites, and thereby augment the natural defense of interferon-induced inhibition of PARP. PARP is implicated in various pathological conditions, including neurodegenerative disorders, viral infections such as AIDS, autoimmune diseases and cancer. Accordingly, this invention also relates to methods of reducing cellular toxicity, and treating or preventing such diseases, by increasing cellular concentrations of nicotinamide, kynurenic acid and xanthurenic acid using the compositions of this invention.

67 Claims, 8 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 8

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	RWC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	-----------	-------

☐ 25. Document ID: US 5902732 A

L4: Entry 25 of 39

File: USPT

May 11, 1999

US-PAT-NO: 5902732  
DOCUMENT-IDENTIFIER: US 5902732 A

TITLE: Drug screening process measuring changes in cell volume

DATE-ISSUED: May 11, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hochman; Daryl W.	Seattle	WA	N/A	N/A

US-CL-CURRENT: 435/29; 435/2887

ABSTRACT:

There is disclosed a method for screening drug candidate compounds for anti-epileptic activity, a method for screening drug candidate compounds for activity to prevent or treat symptoms of Alzheimer's disease, and a method for determining cell viability and health of living cells inside polymeric tissue implants.

14 Claims, 33 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 6

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

---

☐ 26. Document ID: US 5882893 A

L4: Entry 26 of 39

File: USPT

Mar 16, 1999

US-PAT-NO: 5882893  
DOCUMENT-IDENTIFIER: US 5882893 A

TITLE: Nucleic acids encoding muscarinic receptors and uses therefor

DATE-ISSUED: March 16, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Goodearl; Andrew D.J.	Natick	MA	N/A	N/A

US-CL-CURRENT: 435/691; 435/2523, 435/25411, 435/3201, 435/325, 536/235,  
536/2431

ABSTRACT:

The invention provides isolated nucleic acids molecules, designated muscarinic acetylcholine receptor 6 ("mAChR-6") nucleic acid molecules, which encode polypeptides involved in the modulation of acetylcholine responses in acetylcholine responsive cells. The invention also provides antisense nucleic acid molecules, expression vectors containing mAChR-6 nucleic acid molecules, host cells into which the expression vectors have been introduced, and non-human transgenic animals in which an mAChR-6 gene has been introduced or disrupted. The invention still further provides isolated mAChR-6 polypeptides, fusion polypeptides, antigenic peptides, and anti-mAChR-6 antibodies. Diagnostic, screening, and therapeutic methods utilizing compositions of the invention are also provided.

19 Claims, 13 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 13

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	-----------	-------

---

☐ 27. Document ID: US 5871946 A

L4: Entry 27 of 39

File: USPT

Feb 16, 1999

US-PAT-NO: 5871946

DOCUMENT-IDENTIFIER: US 5871946 A

TITLE: Method for determining activity of enzymes in metabolically active whole cells

DATE-ISSUED: February 16, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lucas; Frank J.	Boca Raton	FL	N/A	N/A
Jaffe; Gerald E.	Pembroke Pines	FL	N/A	N/A
Bott; Steven	Pembroke Pines	FL	N/A	N/A
Carter; James H.	Plantation	FL	N/A	N/A

US-CL-CURRENT: 435/18; 435/29, 435/962, 435/968

ABSTRACT:

An assay compound or a salt thereof for assaying the activity of an enzyme inside a metabolically active whole cell is disclosed. The assay compound includes a leaving group and an indicator group. The leaving group is selected from the group comprising amino acids, peptides, saccharides, sulfates, phosphates, esters, phosphate esters, nucleotides, polynucleotides, nucleic acids, pyrimidines, purines, nucleosides, lipids and mixtures thereof. The indicator group is selected from compounds which have a first state when joined to the leaving group, and a second state when the leaving group is cleaved from the indicator group by the enzyme. Preferably, the indicator compounds are rhodamine 110, rhodol, and fluorescein and analogs of these compounds. A method of synthesizing the compound as well as methods of using these compounds to measure enzyme activity are also disclosed.

32 Claims, 50 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 45

---

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	-----------	-------

---

☐ 28. Document ID: US 5863734 A

L4: Entry 28 of 39

File: USPT

Jan 26, 1999

US-PAT-NO: 5863734  
DOCUMENT-IDENTIFIER: US 5863734 A

TITLE: Method of treatment for obsessive-compulsive disorder

DATE-ISSUED: January 26, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Karayorgou; Maria	New York	NY	N/A	N/A
Gogos; Joseph A.	New York	NY	N/A	N/A

US-CL-CURRENT: 435/6; 435/810, 435/91.1, 435/91.2, 536/23.1, 536/24.33

ABSTRACT:

Methods of identifying patients having a susceptibility to obsessive-compulsive disorder resultant from a reduced level of Catechol-O-methyltransferase (COMT) are described. Therapies, utilizing COMT or COMT agonists, or dopamine antagonists in combination therewith, are also envisioned, as well as methods for determining the patients which will benefit the most from such therapies.

5 Claims, 2 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KOMIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	-------	-----------	-------

---

☐ 29. Document ID: US 5849513 A

L4: Entry 29 of 39

File: USPT

Dec 15, 1998



US-PAT-NO: 5849513  
DOCUMENT-IDENTIFIER: US 5849513 A

TITLE: Assay reagent

DATE-ISSUED: December 15, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jaffe; Gerald E.	Pembroke Pines	FL	N/A	N/A
Lucas; Frank J.	Boca Raton	FL	N/A	N/A
Carter; James H.	Plantation	FL	N/A	N/A

US-CL-CURRENT: 435/29; 435/4

ABSTRACT:

An assay compound or a salt thereof for assaying the activity of an enzyme inside a metabolically active whole cell is disclosed. The assay compound includes a leaving group and an indicator group. The leaving group is selected from the group comprising amino acids, peptides, saccharides, sulfates, phosphates, esters, phosphate esters, nucleotides, polynucleotides, nucleic acids, pyrimidines, purines, nucleosides, lipids and mixtures thereof. The indicator group is selected from compounds which have a first state when joined to the leaving group, and a second state when the leaving group is cleaved from the indicator group by the enzyme. Preferably, the indicator compounds are rhodamine 110, rhodol, and fluorescein and analogs of these compounds. A method of synthesizing the compound as well as methods of using these compounds to measure enzyme activity are also disclosed.

22 Claims, 50 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 45

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	-----------	-------

---

☐ 30. Document ID: US 5824700 A

L4: Entry 30 of 39

File: USPT

Oct 20, 1998

US-PAT-NO: 5824700  
DOCUMENT-IDENTIFIER: US 5824700 A

TITLE: Ortho-quinone derivatives novel synthesis therefor and their use in the inhibition of neoplastic cell growth

DATE-ISSUED: October 20, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Frydman; Benjamin J.	Madison	WI	N/A	N/A
Witiak; Donald T.	Madison	WI	N/A	N/A
Sun; Jerry Shunneng	Madison	WI	N/A	N/A
Geiser; Andrew H.	Madison	WI	N/A	N/A

US-CL-CURRENT: 514/454; 549/389, 549/458

ABSTRACT:

The invention relates to .beta.-lapachone derivatives of formula II and compositions containing said compounds: ##STR1## wherein, R.sup.5, R.sup.6 and R.sup.7 are as defined in the specification. The compounds are potent inhibitors of neoplastic cell growth and proliferation.

7 Claims, 10 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 10

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

---

☐ 31. Document ID: US 5804584 A

L4: Entry 31 of 39

File: USPT

Sep 8, 1998

US-PAT-NO: 5804584  
DOCUMENT-IDENTIFIER: US 5804584 A

TITLE: Therapeutic compounds containing a monocyclic five- to six- membered ring structure having one to two nitrogen atoms

DATE-ISSUED: September 8, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Underiner; Gail E.	Brier	WA	N/A	N/A
Porubek; David	Seattle	WA	N/A	N/A
Klein; J. Peter	Vashon Island	WA	N/A	N/A
Woodson; Paul	Edmonds	WA	N/A	N/A

US-CL-CURRENT: 514/269; 514/256, 544/242, 544/298, 544/301, 544/302

ABSTRACT:

Disclosed are therapeutic compounds having the formula:

(R)<sub>j</sub>-(core moiety),

including resolved enantiomers, diastereomers, hydrates, salts, solvates and mixtures thereof. j is an integer from one to three, the core moiety is either non-cyclic or comprises at least one five- to seven-membered ring structure, R may be selected from the group consisting of hydrogen, halogen, hydroxyl, amino, substituted or unsubstituted benzyl, C<sub>sub.1-6</sub> alkyl or C<sub>sub.1-6</sub> alkenyl, and at least one R has the formula I: ##STR1## n is an integer from seven to twenty and at least one of X or Y is --OH. The other of X or Y, which is not --OH, is hydrogen, CH<sub>sub.3</sub> --, CH<sub>sub.3</sub> --CH<sub>sub.2</sub> --, CH<sub>sub.3</sub> --(CH<sub>sub.2</sub>)<sub>sub.2</sub> -- or (CH<sub>sub.3</sub>)<sub>sub.2</sub> --CH<sub>sub.2</sub> --, and each W<sub>sub.1</sub>, W<sub>sub.2</sub>, and W<sub>sub.3</sub> is independently hydrogen, CH<sub>sub.3</sub> --, CH<sub>sub.3</sub> --CH<sub>sub.2</sub> --, CH<sub>sub.3</sub> --(CH<sub>sub.2</sub>)<sub>sub.2</sub> -- or (CH<sub>sub.3</sub>)<sub>sub.2</sub> --CH<sub>sub.2</sub> --. The X, Y, W<sub>sub.1</sub>, W<sub>sub.2</sub>, or W<sub>sub.3</sub> alkyl groups may be unsubstituted or substituted by an hydroxyl, halo or dimethylamino group. The disclosed compounds and therapeutic compositions thereof are useful in treating individuals having a disease or treatment-induced toxicity, mediated by second messenger activity.

9 Claims, 15 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 10

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	RMC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	-----------	-------

☐ 32. Document ID: US 5780476 A

L4: Entry 32 of 39

File: USPT

Jul 14, 1998

US-PAT-NO: 5780476  
DOCUMENT-IDENTIFIER: US 5780476 A

TITLE: Hydroxyl-containing xanthine compounds

DATE-ISSUED: July 14, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Underiner; Gail E.	Brier	WA	N/A	N/A
Porubek; David	Seattle	WA	N/A	N/A
Klein; J. Peter	Vashon Island	WA	N/A	N/A
Woodson; Paul	Edmonds	WA	N/A	N/A

US-CL-CURRENT: 514/263

ABSTRACT:

Disclosed are therapeutic compounds having the formula:

(R)<sub>j</sub> - (core moiety),

including resolved enantiomers, diastereomers, hydrates, salts, solvates and mixtures thereof. j is an integer from one to three, the core moiety is either non-cyclic or comprises at least one five- to seven-membered ring structure, R may be selected from the group consisting of hydrogen, halogen, hydroxyl, amino, substituted or unsubstituted benzyl, C.sub.1-6 alkyl or C.sub.1-6 alkenyl, and at least one R has the formula I: ##STR1## n is an integer from seven to twenty and at least one of X or Y is --OH. The other of X or Y, which is not --OH, is hydrogen, CH.sub.3 --, CH.sub.3 --CH.sub.2 --, CH.sub.3 --(CH.sub.2).sub.2 -- or (CH.sub.3).sub.2 --CH.sub.2 --, and each W.sub.1, W.sub.2, and W.sub.3 is independently hydrogen, CH.sub.3 --, CH.sub.3 --CH.sub.2 --, CH.sub.3 --(CH.sub.2).sub.2 -- or (CH.sub.3).sub.2 --CH.sub.2 --. The X, Y, W.sub.1, W.sub.2, or W.sub.3 alkyl groups may be unsubstituted or substituted by an hydroxyl, halo or dimethylamino group. The disclosed compounds and therapeutic compositions thereof are useful in treating individuals having a disease or treatment-induced toxicity, mediated by second messenger activity.

11 Claims, 15 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 10

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	EXAM	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ 33. Document ID: US 5776720 A

L4: Entry 33 of 39

File: USPT

Jul 7, 1998

US-PAT-NO: 5776720  
DOCUMENT-IDENTIFIER: US 5776720 A

TITLE: Assay reagent

DATE-ISSUED: July 7, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jaffe; Gerald E.	Pembroke Pines	FL	N/A	N/A
Lucas; Frank J.	Boca Raton	FL	N/A	N/A
Carter; James H.	Plantation	FL	N/A	N/A

US-CL-CURRENT: 435/29; 435/4

ABSTRACT:

An assay compound or a salt thereof for assaying the activity of an enzyme inside a metabolically active whole cell is disclosed. The assay compound includes a leaving group and an indicator group. The leaving group is selected from the group comprising amino acids, peptides, saccharides, sulfates, phosphates, esters, phosphate esters, nucleotides, polynucleotides, nucleic acids, pyrimidines, purines, nucleosides, lipids and mixtures thereof. The indicator group is selected from compounds which have a first state when joined to the leaving group, and a second state when the leaving group is cleaved from the indicator group by the enzyme. Preferably, the indicator compounds are rhodamine 110, rhodol, and fluorescein and analogs of these compounds. A method of synthesizing the compound as well as methods of using these compounds to measure enzyme activity are also disclosed.

47 Claims, 50 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 45

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	RMC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	-----------	-------

---

☐ 34. Document ID: US 5763625 A

L4: Entry 34 of 39

File: USPT

Jun 9, 1998

US-PAT-NO: 5763625

DOCUMENT-IDENTIFIER: US 5763625 A

TITLE: Synthesis and use of .beta.-lapachone analogs

DATE-ISSUED: June 9, 1998

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Boothman; David A.	Madison	WI	N/A	N/A
Frydman; Benjamin J.	Madison	WI	N/A	N/A
Witiak; Donald T.	Madison	WI	N/A	N/A

US-CL-CURRENT: 549/390; 549/391, 549/393, 549/395

## ABSTRACT:

3-Substituted-.beta.-lapachone analogs and their use either alone or to augment chemotherapy or radiotherapy to induce programmed neoplastic cell death without exhibiting toxicity to surrounding normal cells are disclosed. In particular, 3-allyl-.beta.-lapachones, 3-alkyl-.beta.-lapachones and 3-halo-.beta.-lapachones were found to be Topoisomerase (Topo I) inhibitors. When these analogs are used alone there is a reversible single-strand break in the DNA of neoplastic cells causing apoptosis and cell death in some cells. However, when these analogs are combined with chemotherapy or X-irradiation, an irreversible Topo I-mediated break is achieved. A new and more efficient chemical synthesis of the compounds is also disclosed.

32 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	RUMC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ 35. Document ID: US 5733719 A

L4: Entry 35 of 39

File: USPT

Mar 31, 1998

US-PAT-NO: 5733719  
DOCUMENT-IDENTIFIER: US 5733719 A

TITLE: Method of making an assay compound

DATE-ISSUED: March 31, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jaffe; Gerald E.	Pembroke Pines	FL	N/A	N/A
Lucas; Frank J.	Boca Raton	FL	N/A	N/A
Carter; James H.	Plantation	FL	N/A	N/A

US-CL-CURRENT: 435/4; 435/29, 435/968

ABSTRACT:

An assay compound or a salt thereof for assaying the activity of an enzyme inside a metabolically active whole cell is disclosed. The assay compound includes a leaving group and an indicator group. The leaving group is selected from the group comprising amino acids, peptides, saccharides, sulfates, phosphates, esters, phosphate esters, nucleotides, polynucleotides, nucleic acids, pyrimidines, purines, nucleosides, lipids and mixtures thereof. The indicator group is selected from compounds which have a first state when joined to the leaving group, and a second state when the leaving group is cleaved from the indicator group by the enzyme. Preferably, the indicator compounds are rhodamine 110, rhodol, and fluorescein and analogs of these compounds. A method of synthesizing the compound as well as methods of using these compounds to measure enzyme activity are also disclosed.

10 Claims, 50 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 45

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWAC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

---

☐ 36. Document ID: US 5698411 A

L4: Entry 36 of 39

File: USPT

Dec 16, 1997

US-PAT-NO: 5698411  
DOCUMENT-IDENTIFIER: US 5698411 A

TITLE: Method for determining activity of enzymes in metabolically active whole cells

DATE-ISSUED: December 16, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lucas; Frank J.	Baca Raton	FL	N/A	N/A
Jaffe; Gerald E.	Pembroke Pines	FL	N/A	N/A
Bott; Steven E.	Pembroke Pines	FL	N/A	N/A
Carter; James H.	Plantation	FL	N/A	N/A

US-CL-CURRENT: 435/29; 435/34, 435/4

ABSTRACT:

A method for assaying the activity of an enzyme inside a metabolically active whole cell is disclosed. The assay compound includes a leaving group and an indicator group. The leaving group is selected from the group comprising amino acids, peptides, saccharides, sulfates, phosphates, esters, phosphate esters, nucleotides, polynucleotides, nucleic acids, pyrimidines, purines, nucleosides, lipids and mixtures thereof. The indicator group is selected from compounds which have a first state when joined to the leaving group, and a second state when the leaving group is cleaved from the indicator group by the enzyme. Preferably, the indicator compounds are rhodamine 110, rhodol, and fluorescein and analogs of these compounds. A method of synthesizing the compound is also disclosed.

77 Claims, 50 Drawing figures Exemplary Claim Number: 1  
Number of Drawing Sheets: 45

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	RMC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	-----------	-------

☐ 37. Document ID: US 5631271 A

L4: Entry 37 of 39

File: USPT

May 20, 1997



US-PAT-NO: 5631271  
DOCUMENT-IDENTIFIER: US 5631271 A

TITLE: Methods and preparations for the treatment and prophylaxis of metabolic disturbances

DATE-ISSUED: May 20, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Serfontein; Willem J.	Faerie Glen	N/A	N/A	ZAX

US-CL-CURRENT: 514/345; 514/351

ABSTRACT:

Treatment or prophylaxis of depressed or inadequate intracellular pyridoxal phosphate levels in a human or animal patient resulting from a condition, wherein the pyridoxine (PN)--pyridoxal phosphate (PLP) pathway is disturbed by cellular defects and concomitant enzyme deficiencies. These may be due to genetic causes or cell immaturity, as occurs in infants and in diseases resulting in erythrocytes destruction. In infants it was found, for the first time, that this leads to elevated homocysteine levels.

The deficiencies are counteracted by the administration of pyridoxal or a precursor of pyridoxal which in vivo, once it has entered the bloodstream, is rapidly converted into pyridoxal without the intervention of oxidase or oxygen, optionally and preferably without the intervention of kinase and/or of PN in slow-release form and at a daily dosage rate not exceeding 0.7 mg/kg/day in the long term.

In the case of pharmaceutical or dietary preparations for infants, in particular premature infants, these contain in addition vitamin B12 and folic acid or folate.

43 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

☐ 38. Document ID: US 5540923 A

L4: Entry 38 of 39

File: USPT

Jul 30, 1996

US-PAT-NO: 5540923  
DOCUMENT-IDENTIFIER: US 5540923 A

TITLE: Interferon proteins

DATE-ISSUED: July 30, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ebbesen; Peter	Hojberg	N/A	N/A	DKX
Aboagye-Mathiesen; George	Ostbirk	N/A	N/A	DKX
Toth; Ferenc D.	Debrecen	N/A	N/A	DKX

US-CL-CURRENT: 424/85.5; 424/85.4, 424/85.6, 530/351

ABSTRACT:

The invention relates to a method for producing isolating and purifying trophoblast interferon proteins such as .beta.-interferons, .alpha..sub.I -interferon proteins, .alpha..sub.II -interferon proteins, and .gamma.-interferon proteins, and to a method of using the interferon proteins, e.g. for inhibiting tumoral growth or metastatic processes, for preventing graft-versus-host reaction, against leukemia, against viral activity, and against infection of the placenta; as well as antibodies against the interferon proteins.

17 Claims, 10 Drawing figures Exemplary Claim Number: 1,13  
Number of Drawing Sheets: 7

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	RMC	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	-----	-----------	-------

---

☐ 39. Document ID: US 5084482 A

L4: Entry 39 of 39

File: USPT

Jan 28, 1992

US-PAT-NO: 5084482  
DOCUMENT-IDENTIFIER: US 5084482 A

TITLE: Methods for inhibiting inflammatory ischemic, thrombotic and  
cholesterolemic disease response with methionine compounds

DATE-ISSUED: January 28, 1992

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hirsch; Gerald P.	Atlanta	GA	N/A	N/A
Bayless; Robert K.	Austin	TX	N/A	N/A

US-CL-CURRENT: 514/562; 424/641, 424/702, 514/249, 514/260, 514/346, 514/458,  
514/474, 514/494, 514/501, 514/532, 514/550, 514/559, 514/59, 514/725, 514/727

ABSTRACT:

This invention concerns novel methods employing compositions containing as an active antioxidant or antiinflammatory agent the amino acid methionine, and/or one or more related compounds including certain metabolic precursor compounds, for treating or inhibiting inflammatory ischemic, thrombotic and cholesterolemic disease response in a subject. The compounds include the methionine hydroxy analogs, as well as compounds having the structural formula I: ##STR1## and pharmaceutically acceptable N-(mono- and di-carboxylic acid) acyl derivatives and alkyl esters thereof, where n is an integer from 1 to 3.

16 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	K00C	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-----------	-------

Generate Collection

Term	Documents
PATHWAY.USPT.	31382
PATHWAYS.USPT.	19779
(3 AND PATHWAY).USPT.	39

Display

20

Documents, starting with Document:

39

Display Format:

REV

Change Format

=> d his

(FILE 'HOME' ENTERED AT 11:32:02 ON 29 SEP 2000)

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, SCISEARCH, BIOTECHDS' ENTERED AT  
11:32:21 ON 29 SEP 2000

L1 100510 S DRUG(2W)RESPONSE  
L2 2437 S L1 AND CELLULAR  
L3 123 S L2 AND TRANSFORMATION  
L4 12 S L3 AND PATH?  
L5 11 DUP REM L4 (1 DUPLICATE REMOVED)

=> d ibib abs 15 1-11

L5 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2000 ACS  
ACCESSION NUMBER: 1999:655894 CAPLUS  
DOCUMENT NUMBER: 131:267026  
TITLE: Methods for identifying **pathways** of drug  
action  
INVENTOR(S): Stoughton, Roland; Friend, Stephen H.  
PATENT ASSIGNEE(S): Rosetta Inpharmatics, Inc., USA  
SOURCE: U.S., 47 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5965352	A	19991012	US 1998-74983	19980508
WO 9958708	A1	19991118	WO 1999-US10050	19990507
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 9938906	A1	19991129	AU 1999-38906	19990507
PRIORITY APPLN. INFO.:			US 1998-74983	19980508
			WO 1999-US10050	19990507

AB Methods are provided for identifying and representing the biol. **pathways** of drug action on a cell by: (i) measuring responses of **cellular** constituents to graded exposures of the cell to a drug of interest; (ii) measuring the responses of **cellular** constituents to perturbations in one or more biol. **pathways** of the cell; and (iii) scaling a combination of the measured **pathway** responses to fit the measured **drug responses** best according to an objective measure. In alternative embodiments, the present invention also provides for assessing the significance of the identified representation and for verifying that the identified **pathways** are actual **pathway** of drug action. In various embodiments, the effects on the cell can be detd. by measuring gene expression, protein abundances, protein activities, or a combination of such measurements. In various

embodiments, perturbation to a biol. **pathway** in the cell can be made by use of titratable expression systems, use of transfection systems, modification to abundances of **pathway** RNAs, modifications to abundances of **pathway** proteins, or modifications to activities of the **pathway** proteins. The present invention also provides methods for drug development based on the methods for identifying biol. **pathways** of drug action, and methods for representing the biol. **pathways** involved in the effect of an environmental change upon a cell.

REFERENCE COUNT: 30

REFERENCE(S): (1) Anderson; Adv Immunol 1994, V56, P151 CAPLUS  
(2) Anon; WO 9417208 1994 CAPLUS  
(3) Anon; EP 0816511 A1 1996 CAPLUS  
(4) Anon; WO 9710365 1997 CAPLUS  
(5) Anon; WO 9727317 1997 CAPLUS  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 11 MEDLINE

ACCESSION NUMBER: 1999275903 MEDLINE

DOCUMENT NUMBER: 99275903

TITLE: Effects of interleukin 3, interleukin 7, and B-cell growth factor on proliferation and drug resistance in vitro in childhood acute lymphoblastic leukemia.

AUTHOR: Duyn A E; Kaspers G J; Pieters R; Van Zantwijk C H; Broekema G J; Hahlen K; Veerman A J

CORPORATE SOURCE: Department of Pediatrics, University Hospital Vrije Universiteit, Amsterdam, The Netherlands.

SOURCE: ANNALS OF HEMATOLOGY, (1999 Apr) 78 (4) 163-71.  
Journal code: A2P. ISSN: 0939-5555.

PUB. COUNTRY: GERMANY: Germany, Federal Republic of  
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals; Cancer Journals

ENTRY MONTH: 199908

ENTRY WEEK: 19990801

AB Growth factors have been reported to enhance the cytotoxicity of anticancer agents. In our study we investigated the capacities of interleukin 3 (IL-3), interleukin 7 (IL-7), low-molecular-weight B-cell growth factor (lmw-BCGF), and IL-3 + 7 to induce proliferation and to modulate the drug resistance of childhood acute lymphoblastic leukemia (ALL) cells. Proliferation was assessed with the methyl-thiazole-tetrazolium (MTT) assay and other parameters. **Cellular** resistance to cytarabine, thioguanine, and prednisolone was measured

using the MTT assay. In 19 samples containing >90% leukemic cells the proliferative response and the modulation of drug resistance was markedly heterogeneous between patient samples and between growth factors. All growth factors were able to stimulate proliferation significantly after 5 days of culture. lmw-BCGF was the most potent growth factor in this respect. Cytotoxicity of cytarabine and thioguanine was significantly increased by IL-7, that of thioguanine by IL-3 as well. IL-7 enhanced the cytotoxicity of thioguanine significantly more than IL-3 and lmw-BCGF and that of cytarabine more than IL-3. Cytotoxicity of prednisolone was not significantly influenced by any growth factor. In individual cases,

growth factors reduced the cytotoxicity of the drugs. IL-3 + 7 did not add activity to the most potent single growth factor in both proliferation

and drug resistance measurements. This study shows that IL-3, IL-7, and lmw-BCGF generally induce and occasionally inhibit proliferation of ALL cells. Furthermore, they may either increase or decrease cytotoxicity of anticancer **drugs**. This heterogeneous **response** to growth factors concerning induction of proliferation and modulation of drug resistance should be taken into account in their clinical use.

ACCESSION NUMBER: 1997:243006 BIOSIS  
DOCUMENT NUMBER: EV199799542209  
TITLE: cell activation in drug allergies.  
AUTHOR(S): Schnyder, B.; Pichler, W. J. (1)  
CORPORATE SOURCE: (1) Inselspital, CH-3010 Bern Switzerland  
SOURCE: Allergologie, (1997) Vol. 20, No. 2, pp. 58-62.  
ISSN: 0344-5062.  
DOCUMENT TYPE: Journal; Article  
LANGUAGE: German  
SUMMARY LANGUAGE: German; English

AB The frequency of drug allergies due to a specific immunological reaction is estimated to be 15% of all drug-induced side effects. The **pathomechanism** of such allergies depends on the type of drug and various patient-related factors. They have been elucidated only in a few cases. According to current concepts, drugs or their metabolites have to be recognized by T cells to elicit an allergic reaction. Indeed, T cell sensitization has been demonstrated by experimental studies in various drug allergies using both lymphocyte **transformation** tests and skin patch tests. For T cell recognition, an antigen has to be presented by an APC on the MHC. Most drug and drug metabolites have a low molecular weight and gain their immunogenicity by binding to a carrier protein. Different ways of hapten presentation have been proposed: the hapten binds covalently to a serum or **cellular** protein, which is subsequently processed and presented as a modified protein; the hapten alters antigen processing, which leads to the presentation of cryptic peptide; the hapten binds in a direct and extracellular way to a preexisting MHC peptide complex. Specific restimulation of peripheral blood mononuclear cells in primary cultures of drug-allergic patients with the relevant drug leads to an activation of CD4+ and CD8+ T-cells. In the peripheral blood of patients with hypersensitivity syndrome, also an in vivo activation of CD4+ and CD8+ T-cells has been described, which correlated to the clinical course. Most drug-specific T cell clones have an alpha-beta+ TCR. However, few lidocaine-specific T cell clones with gamma-delta+ TCR have been described recently. Analysis of V-beta chains of TCRs in primary cultures of drug-allergic patients revealed either oligoclonal or polyclonal patterns, depending on the patient and the drug. The cytokine production of drug-specific T cells revealed a variable pattern. Occasionally, a high IL-5 production was seen. Recently, a drug-specific, MHC-restricted, T cell-mediated cytotoxicity in CD4+ and CD8+ T-cell clones could be shown. Our data show that in drug allergies T cells are crucial for the initiation and also for the effector phase of a **drug-specific immune response**. This would have implications for the development of new diagnostic methods and for the search of a sensitizing potential of a novel drug.

L5 ANSWER 4 OF 11 MEDLINE  
ACCESSION NUMBER: 92094729 MEDLINE  
DOCUMENT NUMBER: 92094729  
TITLE: [Immunity and the possibilities for immunomodulation in acute pyelonephritis].  
Sostoianie immuniteta i vozmozhnosti immunomoduliatsii pri ostrom pielonefrite.  
AUTHOR: Vozianov A F; Drannik G N; Petrovskaia I A; Kushko LIa; Pasechnikov S P; Pshegornitskii I V; Ozvinchuk I I; Musii MIa; Listopad N K; Pogrebinskii V M  
SOURCE: UROLOGIIA I NEFROLOGIIA, (1991 Sep-Oct) (5) 30-4.  
Journal code: WRS. ISSN: 0042-1154.  
PUB. COUNTRY: USSR  
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: Russian

ENTRY MONTH: 199204

AB The paper presents evidence on dysfunction of natural killer cells and abnormal proliferative response of peripheral blood mononuclears to T- and

B-cell mitogens (PHA, Phytolacca) in patients at varying stages of acute pyelonephritis. A number of immunomodulators (recombinant alpha 2-interferon, IL-2 and tactivin) produce different effects on natural killer activity and lymphocyte blast **transformation** in healthy donors and pyelonephritis patients. Immunotropic effects of immunopeptides

depend on the **drug** dose, the **response** of various subpopulations of the immunocompetent cells being individual. It is suggested that immune system, natural killer activity in particular, plays

an important part in **pathogenesis** of acute pyelonephritis. In vitro experiments demonstrate that there can be a positive clinical response to tactivin and recombinant alpha 2-interferon administered in doses activating the function of certain immunocompetent cells.

L5 ANSWER 5 OF 11 MEDLINE

ACCESSION NUMBER: 91007992 MEDLINE

DOCUMENT NUMBER: 91007992

TITLE: Relationships among tumor responsiveness, cell sensitivity,

doxorubicin **cellular** pharmacokinetics and drug-induced DNA alterations in two human small-cell lung cancer xenografts.

AUTHOR: Pratesi G; Capranico G; Binaschi M; De Isabella P; Pilotti S; Supino R; Zunino F

CORPORATE SOURCE: Divisions of Experimental Oncology B, Istituto Nazionale per lo Studio e la Cura dei Tumori, Milan, Italy..

SOURCE: INTERNATIONAL JOURNAL OF CANCER, (1990 Oct 15) 46 (4) 669-74.

Journal code: GQU. ISSN: 0020-7136.

PUB. COUNTRY: United States

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals; Cancer Journals

ENTRY MONTH: 199101

AB In an attempt to understand the underlying **cellular**/biochemical factors of sensitivity/resistance in human small-cell lung cancer (SCLC), 2 SCLC tumor lines were compared with respect to tumor responsiveness to drug treatment, cell sensitivity, **cellular** doxorubicin accumulation, and DNA topoisomerase-II-mediated DNA cleavage. The tumor lines growing in nude mice with similar growth characteristics (doubling time around 10 days) were selected since one (POCI tumor) was found to be hypersensitive and the other (POSG tumor) resistant to doxorubicin treatment. The pattern of anti-tumor **drug response** of the doxorubicin-resistant tumor was atypical (i.e., non-adherent to the well-characterized multi-drug-resistant phenotype), since it responded to vincristine. The markedly different in vivo tumor response reflected the intrinsic **cellular** sensitivity to doxorubicin. No correlation was found between **cellular** drug accumulation and doxorubicin sensitivity following in vitro exposure to the drug. In agreement with this observation, the expression of mdr-I gene was undetectable in these tumors. Thus, in the POSG tumor, resistance to doxorubicin occurred without expression of the P-glycoprotein and reduction of **cellular** drug accumulation. In contrast, the extent of DNA cleavage produced by doxorubicin was markedly higher in the doxorubicin-hypersensitive than in the doxorubicin-resistant tumor. These results, taken together with previous observations in SCLC cell lines, support the important role of DNA topoisomerase-mediated effects in the sensitivity of SCLC to doxorubicin.

L5 ANSWER 6 OF 11 MEDLINE

ACCESSION NUMBER: 87260834 MEDLINE  
DOCUMENT NUMBER: 87260834  
TITLE: Tumor cell heterogeneity: divided colony assay for measuring **drug response**.  
AUTHOR: Kuczek T; Axelrod D E  
CONTRACT NUMBER: CA 42795 (NCI)  
SOURCE: PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1987 Jul) 84 (13) 4490-4.  
Journal code: PV3. ISSN: 0027-8424.  
PUB. COUNTRY: United States  
Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals; Cancer Journals  
ENTRY MONTH: 198710

AB In vitro tests for predicting the response of tumors to chemotherapeutic agents might be improved if they were modified to take into account tumor-cell heterogeneity. We have studied the heterogeneity of **cellular** growth rate and **drug response** in mouse fibroblast NIH 3T3 cells and in NIH 3T3 cells transformed with the human HRAS gene (homologue of the Harvey sarcoma virus oncogene v-Ha-ras) from the EJ human bladder carcinoma cell line. Growth-rate heterogeneity was detected as a broad distribution of numbers of cells per colony. In spite of this heterogeneity, secondary colonies have numbers of cells per colony that resemble that of the primary colony from which they were derived. The variance between unrelated secondary colonies is increased by HRASEJ. Colony-size measurements are reliable because primary colonies divided in half formed two groups of secondary colonies (on two separate plates) that had indistinguishable mean colony sizes. Based on these observations, a divided-colony procedure was devised to detect the **drug response** of heterogeneous cell populations. Primary colonies are divided into two groups of cells, one of which is treated with a drug and the other is left untreated as a control. The size distribution of treated secondary colonies is then compared to that of the untreated control and to that of the primary colony from which it was derived. The divided-colony procedure is proposed as a modification of the human-tumor-cloning system to increase the sensitivity and reliability of in vitro procedures used to determine the **drug response** of heterogeneous tumor-cell populations.

L5 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1987:188814 CAPLUS  
DOCUMENT NUMBER: 106:188814  
TITLE: Modulation of the immune response by thioureyllene antithyroid drugs  
AUTHOR(S): Kerr, D. J.; Ferguson, M. M.; McGroarty, J.; McLellan, A. R.; Alexander, W. D.  
CORPORATE SOURCE: Dep. Oral Med. Oral Surg., Univ. Otago, UK  
SOURCE: Int. Congr. Ser. - Excerpta Med. (1986), 711(Thyroid Autoimmun.), 321-2  
CODEN: EXMDA4; ISSN: 0531-5131  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The thioureyllene antithyroid drugs [methimazole [60-56-0] and propylthiouracil [51-52-5]] modified a wide range polymorphonuclear neutrophil function including myeloperoxidase [9003-99-0] activity, killing of Staphylococcus aureus, O consumption, the hexose monophosphate shunt, and alk. phosphatase [9001-78-9]. Methimazole inhibited the cytotoxicity of natural killer lymphocytes and lymphocyte **transformation**. The effects of these drugs might be related to their effects in autoimmune thyroid disease.

L5 ANSWER 8 OF 11 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.



ACCESSION NUMBER: 85129464 EMBASE  
 DOCUMENT NUMBER: 1985129464  
 TITLE: Platelet-derived growth factor and mitogenic activity of a secreted form of the v-sis oncogene product.  
 AUTHOR: Johnsson A.; Betsholtz C.; Von der Helm K.; et al.  
 CORPORATE SOURCE: Department of Medical and Physiological Chemistry, University of Uppsala, Uppsala, Sweden  
 SOURCE: Proceedings of the National Academy of Sciences of the United States of America, (1985) 82/6 (1721-1725).  
 CODEN: PNASA6  
 COUNTRY: United States  
 DOCUMENT TYPE: Journal  
 FILE SEGMENT: 037 Drug Literature Index  
 047 Virology  
 016 Cancer  
 025 Hematology  
 LANGUAGE: English

AB We have compared the functional properties of a growth factor partially purified from medium conditioned by simian sarcoma virus transformed cells with those of platelet-derived growth factor (PDGF). The factor mimicked the effects induced by PDGF: it bound to and activated human fibroblast PDGF receptors and stimulated DNA synthesis. These activities were specifically inhibited by PDGF antibodies and thus elicited by a factor(s) immunologically related to PDGF. The factor behaved as a secretory protein, since about 95% of the receptor-binding activity was found in the medium after a 48-hr serum-free incubation. Structural characterization of the PDGF-like activity revealed a M(r) 24,000 intracellular protein and two polypeptides of M(r) 13,000 and 11,500 released into the medium. The M(r) 13,000 component bound to human fibroblasts; this binding was competitively inhibited by PDGF. The data support the possibility that oncogene products may elicit transforming activity by interacting with the normal **cellular** mitogenic **pathway**.

L5 ANSWER 9 OF 11 BIOSIS COPYRIGHT 2000 BIOSIS  
 ACCESSION NUMBER: 1980:204563 BIOSIS  
 DOCUMENT NUMBER: BA69:79559  
 TITLE: MODULATORY EFFECTS OF ESTROGEN THERAPY ON IMMUNOLOGIC RESPONSIVENESS.  
 AUTHOR(S): ABLIN R J; BUSH I M; BURNS G R; GUINAN P D  
 CORPORATE SOURCE: DIV. IMMUNOL., COOK CTY. HOSP. HEKTOEN INST. MED. RES., CHICAGO, ILL., USA.  
 SOURCE: CANCER DETECT PREV, (1979 (RECD 1980)) 2 (3), 453-470.  
 CODEN: CDPRD4. ISSN: 0361-090X.  
 FILE SEGMENT: BA; OLD  
 LANGUAGE: English

AB A significant reduction in the phytohemagglutinin-induced **transformation** of peripheral blood lymphocytes cultured in autologous serum from patients with prostatic cancer, Peyronie's disease and transexuals following receipt of estrogen therapy was observed. Reduction of lymphocyte **transformation** in patients with prostatic cancer and without malignancy receiving estrogen, e.g., in Peyronie's disease and in transexuals, suggests that such reduction is related to the mode of therapy rather than with malignancy or a particular **pathologic** state. While no direct evidence as yet exists that such in vitro aberrations of lymphocytic responsiveness are reflective of host compromise, these observations are of potential relevance in terms of their implications in the therapeutic management of patients with prostatic and other hormonally-dependent tumors (e.g., of the breast) and responsive diseases through their effect on the **cellular** immunocompetence and of the suitability of hormonally treated patients as

prospective candidates for immunotherapy. Together with evidence of the androgenic and ontogenic dependence of the immunogenicity of a prostatic secretory specific auto-antigen and of its possible analog in man, attention is directed to the possible dual suppressive effect of estrogen, i.e., on the synthesis of antigen and on the immunologic responsiveness of the host to tumor.

L5 ANSWER 10 OF 11 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.  
ACCESSION NUMBER: 75201014 EMBASE  
DOCUMENT NUMBER: 1975201014  
TITLE: In vitro corticosteroid: correlation response with primary open angle glaucoma and ocular corticosteroid sensitivity.  
AUTHOR: Bigger J.F.; Palmberg P.F.; Zink H.A.  
CORPORATE SOURCE: Dept. Ophthalmol., Washington Univ. Sch. Med., St. Louis, Mo., United States  
SOURCE: American Journal of Ophthalmology, (1975) 79/1 (92-97).  
CODEN: AJOPAA  
DOCUMENT TYPE: Journal  
FILE SEGMENT: 012 Ophthalmology  
037 Drug Literature Index  
LANGUAGE: English

AB The **transformation** of human peripheral blood lymphocytes can be inhibited by corticosteroid compounds. In an in vitro study of 100 patients with primary open angle glaucoma and various degrees of ocular pressure responsiveness to corticosteroid testing, varying degrees of sensitivity to corticosteroid compounds existed systematically in the circulating lymphocyte. A high correlation exists between the level of corticosteroid sensitivity in the lymphocyte and in the eye. In vitro **cellular** systems may be useful in evaluating the molecular basis of the variability in corticosteroid response, and in understanding the **pathogenesis** of corticosteroid induced ocular hypertension and primary open angle glaucoma.

L5 ANSWER 11 OF 11 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.  
ACCESSION NUMBER: 76095894 EMBASE  
DOCUMENT NUMBER: 1976095894  
TITLE: Studies of mitogen induced lymphocyte **transformation** by a semi microtechnic.  
AUTHOR: Webel M.L.; Briggs W.A.; Ritts Jr. R.E.  
CORPORATE SOURCE: Dept. Nephrol. Walter Reed Army Inst. Res. Washington D.C., United States  
SOURCE: American Journal of Clinical Pathology, (1975) 64/1 (41-47).  
CODEN: AJCPAI  
DOCUMENT TYPE: Journal  
FILE SEGMENT: 037 Drug Literature Index  
025 Hematology  
026 Immunology, Serology and Transplantation  
030 Pharmacology  
LANGUAGE: English

AB The authors demonstrate that mitogen induced lymphocyte **transformation** can be effectively studied in a semi microsystem allowing multiple studies from a reasonably small volume of blood, which makes the technic more feasible for clinical studies of **cellular** immune mechanisms. The variability among individuals, and from day to day in the same individual, makes repeated, careful kinetic studies necessary for valid data. Moreover, the very wide range of normal responses in man makes the interpretation of **cellular** hyporesponsiveness difficult in **pathologic** states and necessitates the use of several mitogen concentrations and sequential kinetic studies to establish the validity of results.